AMENDMENTS TO THE CLAIMS

Please cancel claim 3 without prejudice.

Please amend claims 1, 4, 12, and 16, and add claims 24-34, such that the status of the claims is as follows:

1. (Currently amended) A method of dispensing a liquid, the method comprising:

providing a fluid container having an outer container and an inner container, a portion of the inner container occupied by a liquid, a remainder of the inner container occupied by a headspace gas;

attaching a connector to the fluid container, the connector including a probe having a flow passage therein, the connector further including a gas passage communicating between an interior of the inner container and an exterior of the outer container;

evacuating the headspace gas from the inner container through the gas passage; and

supplying pressure to the inner container to force liquid from the inner container through the flow passage to a manufacturing process.

2. (Original) The method of claim 1, wherein supplying pressure to the inner container comprises:

supplying fluid under pressure between the inner container and the outer container to dispense liquid from the inner container to a manufacturing process.

3. (Canceled)

4. (Currently amended) The method of claim [[3]] 1, wherein evacuating the headspace gas comprises:

connecting a drain valve between a headspace gas drain and the gas passage;

opening the drain valve to allow the headspace gas to evacuate to the headspace gas drain via the gas passage; and

closing the drain valve when the liquid begins to flow in the gas passage.

5. (Original) The method of claim 4, wherein prior to closing the drain valve, the method further comprises:

supplying fluid under pressure between the inner container and the outer container to force the headspace gas out of the inner container via the gas passage to the headspace gas drain.

6. (Original) The method of claim 4 including:

connecting a liquid sensor between the gas passage and the headspace gas drain to sense when liquid begins to flow in the gas passage.

7. (Original) The method of claim 1, wherein prior to supplying fluid under pressure between the inner container and the outer container, the method further comprises:

introducing an amount of empty detect gas into the inner container.

8. (Original) The method of claim 7, wherein introducing an amount of empty detect gas into the inner container comprises:

connecting a first block valve, a gas quantity controller, and a second block valve between an empty detect gas supply and the gas passage;

opening the first block valve to allow the empty detect gas to flow from the empty detect gas supply into the gas quantity controller;

closing the first block valve when a measured quantity of empty detect gas has filled the gas quantity controller; and

opening the second block valve to allow the empty detect gas to flow from the gas quantity controller into the interior of the inner container via the gas passage.

9. (Original) The method of claim 8, wherein closing the first block valve when a measured quantity of empty detect gas has filled the gas quantity controller comprises:

connecting a pressure regulator gauge between the empty detect gas supply and the gas quantity controller for regulating the pressure in the gas quantity controller as the empty detect gas is introduced into the gas quantity controller; and

closing the first block valve when the measured quantity of empty detect gas has been introduced into the gas quantity controller based upon the pressure in the gas quantity controller.

10. (Original) The method of claim 7, further comprising:

sensing the empty detect gas when the liquid has been exhausted from the inner container; and

terminating dispensing of the liquid to the manufacturing process when the empty detect gas is sensed.

11. (Original) The method of claim 1, further comprising:

weighing the fluid container while the liquid is dispensed to the manufacturing process;

terminating dispensing of the liquid to the manufacturing process when the fluid container reaches an empty weight.

12. (Currently amended) A system for dispensing liquid to a manufacturing process from a container including an outer container and an inner container, the inner container occupied by the liquid and a headspace gas, the system comprising:

a connector attachable to the container and including a probe insertable into the inner container, the probe having a flow passage therein[[;]], the connector further

including a gas passage communicating between the interior of the inner container and an exterior of the outer container; and

means for forcing the headspace gas out of the inner container via the gas passage to a headspace gas drain and for forcing liquid out of the inner container through the flow passage in the probe to the manufacturing process.

13. (Original) The system of claim 12, further comprising:

a drain valve connected between the headspace gas drain and the gas passage, the drain valve having an open position selectable to allow the headspace gas to evacuate to the headspace gas drain via the gas passage, and a closed position selectable when the headspace gas has been exhausted from the interior of the inner container.

14. (Original) The system of claim 13, further comprising:

a liquid sensor connected between the gas passage and the headspace gas drain to sense when liquid begins to flow in the gas passage to indicate that the headspace gas has been exhausted from the interior of the inner container.

15. (Original) The system of claim 12, further comprising:

empty detect means for detecting when the liquid has been exhausted from the inner container.

16. (Currently amended) The system of claim 15, wherein the empty detect means is an empty detect gas sensor, the empty detect gas sensor sensing an empty detect gas introduced into an interior of the inner container immediately prior to dispensing of the liquid to the manufacturing process.

17. (Original) The system of claim 16, further comprising:

a gas quantity controller;

a first block valve connected between an empty detect gas supply and the gas quantity controller, the first block valve having an open position selectable to allow the empty detect gas to flow from the empty detect gas supply into the gas quantity controller, and a closed position selectable when a measured quantity of empty detect gas has been introduced into the gas quantity controller; and

a second block valve connected between the gas quantity controller and an interior of the inner container, the second block valve having an open position selectable to allow the empty detect gas to flow from the gas quantity controller to the interior of the inner container, and a closed position selectable when the empty detect gas has been exhausted from the gas quantity controller.

18. (Original) The system of claim 17, further comprising:

a pressure regulator gauge connected between the empty detect gas supply and the gas quantity controller to regulate the pressure in the gas quantity controller as the empty detect gas is introduced into the gas quantity controller such that the first block valve is closed when the measured quantity of empty detect gas has been introduced into the gas quantity controller based upon the pressure in the gas quantity controller.

19. (Original) The system of claim 17, further comprising:

a select valve having ports connected to the block valve, the headspace gas drain, and the interior of the inner container, wherein the select valve allows selectable fluid connection of the block valve and the headspace gas drain to the interior of the inner container.

20. (Original) The system of claim 15, wherein the empty detect means includes a scale for weighing the fluid container while the liquid is dispensed to the manufacturing process such that dispensing of the liquid is terminated when the fluid container reaches a predetermined weight as measured by the scale.

21. (Original) A liquid handling system comprising:

a container which comprises:

an outer container;

an inner container having an interior; and

wherein a portion of the inner container is occupied by the liquid, and a remainder of the inner container is occupied by a headspace gas;

a connector attachable to the container, the connector including a probe insertable into the inner container and having a flow passage therein, the connector further including a gas passage communicating between the interior of the inner container and an exterior of the outer container; and

a fluid air source in fluid communication with a space between inner walls of the outer container and the inner container for causing fluid under pressure to flow into the space between the inner walls of the outer container and the inner container to force the headspace gas out of the inner container via the gas passage to a headspace gas drain and to force liquid out of the inner container through the flow passage in the probe to the manufacturing process.

22. (Original) The system of claim 21, further comprising:

a liquid sensor connected between the gas passage and the headspace gas drain to sense when liquid begins to flow in the gas passage to indicate that the headspace gas has been exhausted from the interior of the inner container.

23. (Original) The system of claim 21, further comprising:

empty detect means for detecting when the liquid has been exhausted from the inner container.

24. (New) A method of dispensing a liquid, the method comprising:

providing a fluid container having an outer container and an inner container, a portion of the inner container occupied by a liquid, a remainder of the inner container occupied by a headspace gas;

evacuating the headspace gas from the inner container;

introducing an amount of empty detect gas into the inner container; and

supplying pressure to the inner container to force liquid from the inner container to a manufacturing process.

25. (New) The method of claim 24, wherein introducing an amount of empty detect gas into the inner container comprises:

connecting a first block valve, a gas quantity controller, and a second block valve between an empty detect gas supply and the gas passage;

opening the first block valve to allow the empty detect gas to flow from the empty detect gas supply into the gas quantity controller;

closing the first block valve when a measured quantity of empty detect gas has filled the gas quantity controller; and

opening the second block valve to allow the empty detect gas to flow from the gas quantity controller into the interior of the inner container via the gas passage.

26. (New) The method of claim 25, wherein closing the first block valve when a measured quantity of empty detect gas has filled the gas quantity controller comprises:

connecting a pressure regulator gauge between the empty detect gas supply and the gas quantity controller for regulating the pressure in the gas quantity controller as the empty detect gas is introduced into the gas quantity controller; and

closing the first block valve when the measured quantity of empty detect gas has been introduced into the gas quantity controller based upon the pressure in the gas quantity controller.

27. (New) The method of claim 24, further comprising:

sensing the empty detect gas when the liquid has been exhausted from the inner container; and

terminating dispensing of the liquid to the manufacturing process when the empty detect gas is sensed.

28. (New) A system for dispensing liquid to a manufacturing process from a container including an outer container and an inner container, the inner container occupied by the liquid and a headspace gas, the system comprising:

a probe insertable into the inner container, the probe having a flow passage therein;

a gas passage communicating between the interior of the inner container and an exterior of the outer container;

means for forcing the headspace gas out of the inner container via the gas passage to a headspace gas drain and for forcing liquid out of the inner container through the flow passage in the probe to the manufacturing process; and

an empty detect gas sensor configured to sense an empty detect gas introduced into an interior of the inner container immediately prior to dispensing of the liquid to the manufacturing process.

29. (New) The system of claim 28, further comprising:

a gas quantity controller;

a first block valve connected between an empty detect gas supply and the gas quantity controller, the first block valve having an open position selectable to allow the empty detect gas to flow from the empty detect gas supply into the gas quantity controller, and a closed position selectable when a measured quantity of empty detect gas has been introduced into the gas quantity controller; and

a second block valve connected between the gas quantity controller and an interior of the inner container, the second block valve having an open position selectable to allow the empty detect gas to flow from the gas quantity controller to the interior of the inner container, and a closed position selectable when the empty detect gas has been exhausted from the gas quantity controller.

30. (New) The system of claim 29, further comprising:

a pressure regulator gauge connected between the empty detect gas supply and the gas quantity controller to regulate the pressure in the gas quantity controller as the empty detect gas is introduced into the gas quantity controller such that the first block valve is closed when the measured quantity of empty detect gas has been introduced into the gas quantity controller based upon the pressure in the gas quantity controller.

31. (New) The system of claim 29, further comprising:

a select valve having ports connected to the block valve, the headspace gas drain, and the interior of the inner container, wherein the select valve allows selectable fluid connection of the block valve and the headspace gas drain to the interior of the inner container.

32. (New) A connector for use in a system including a fluid container having an outer container and an inner container, a portion of the inner container occupied by a liquid, a remainder of the inner container occupied by a headspace gas, the connector comprising:

a gas passage adapted to communicate between an interior of the inner container and an exterior of the outer container, wherein the system is adapted to evacuate the headspace gas from the inner container through the gas passage; and

a probe insertable into the inner container and having a flow passage therein, wherein the system is adapted to force liquid from the inner container through the flow passage to a manufacturing process.

33. (New) The connector of claim 32, further comprising

an empty detect gas sensor adapted to sense an empty detect gas introduced into the interior of the inner container immediately prior to dispensing of the liquid to the manufacturing process.

34. (New) The connector of claim 32, wherein fluid under pressure in the space between the outer container and the inner container forces the headspace gas out of the inner container via the gas passage and liquid out of the inner container through the flow passage to the manufacturing process.